Appl. No. : 10/502511 Filed : July 23, 2004

AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated:

1-12 (Canceled)

13. (Currently amended) A method for blocking or reducing the adverse effects of at least one type of radiation selected from the group consisting of x-rays, gamma rays and electron beams, the method comprising:

determining that a subject will be exposed to 10 kGy or more of said x-rays, gamma rays and/or electron beams;

in response to the determination and prior to the exposure, protecting the subject with a radioprotective material comprising at <u>lest least</u> one member selected from the group consisting of collagens, keratins, silk fibroins and their derivatives.

- 14. (Currently amended) A method according to claim 13, wherein at least one member selected from the group consisting of collagens, keratins, silk fibroins and their derivatives is administered to, mixed with, coated on or immobilized on a the subject.
- 15. (Currently amended) A method according to claim 13, wherein a radioprotective plastic product, radioprotective film, radioprotective sheet, radioprotective coating agent, radioprotective cosmetic product, or radioprotective fiber comprising at least one member selected from the group consisting of collagens, keratins, silk fibroins and their derivatives is used to protect a the subject.
- 16. (Currently amended) A method according to claim 15, wherein a product comprising at least one member selected from the group consisting of collagens, keratins, silk fibroins and their derivatives is placed over, applied to or administered to a the subject.
- 17. (Currently amended) A method according to claim 13, wherein at least one member selected from the group consisting of collagens, keratins, silk fibroins and their derivatives is used in such a manner that the at least one member is present inside a the subject or inside a the surface layer of a subject in a total amount of 0.05 wt.% to 40 wt.%.
- 18. (Previously presented) A method according to claim 13, wherein the subject is selected from the group consisting of agricultural products, marine products, foods,

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domestic animals, pets, electronic precision instruments, textiles, medical and experimental materials.

- 19. (Previously presented) A method according to claim 13, wherein the subject is a human.
- 20. (New) A method for blocking or reducing the adverse effects of radiation from electron beams, the method comprising:

determining that a subject will be exposed to electron beams;

in response to the determination and prior to the exposure, protecting the subject with a radioprotective material comprising at lest one member selected from the group consisting of collagens, keratins, silk fibroins and their derivatives.

- 21. (New) A method according to claim 20, wherein at least one member selected from the group consisting of collagens, keratins, silk fibroins and their derivatives is administered to, mixed with, coated on or immobilized on the subject.
- 22. (New) A method according to claim 20, wherein a radioprotective plastic product, radioprotective film, radioprotective sheet, radioprotective coating agent, radioprotective cosmetic product, or radioprotective fiber comprising at least one member selected from the group consisting of collagens, keratins, silk fibroins and their derivatives is used to protect the subject.
- 23. (New) A method according to claim 22, wherein a product comprising at least one member selected from the group consisting of collagens, keratins, silk fibroins and their derivatives is placed over, applied to or administered to the subject.
- 24. (New) A method according to claim 20, wherein at least one member selected from the group consisting of collagens, keratins, silk fibroins and their derivatives is used in such a manner that the at least one member is present inside the subject or inside a surface layer of the subject in a total amount of 0.05 wt.% to 40 wt.%.
- 25. (New) A method according to claim 20, wherein the subject is selected from the group consisting of agricultural products, marine products, foods, domestic animals, pets, electronic precision instruments, textiles, medical and experimental materials.
 - 26. (New) A method according to claim 20, wherein the subject is a human.